

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A gateway for connecting networks of different types, for connecting a first network and a second network which uses a signal format different from that of the first network, said gateway comprising:

a conversion section which converts a signal used in the first network to a signal to be used in the second network, and a signal used in the second network to a signal to be used in the first network, when communication is performed between a terminal connected to the first network and a terminal connected to the second network;

a detection section which detects conversion-process information containing at least one of the time said conversion section spent to convert the signal and the amount of data converted; and

a network-connecting section which is connected to at least one of the first and second networks and which transmits the conversion-process information to a fee-charging system of the first network or a fee-charging system of the second network.

2. (Original) The gateway according to claim 1, wherein said conversion section converts at least one of a call-control signal generated by call-connection signaling, an audio signal generated by an audio CODEC and a video signal generated by a video CODEC.

3. (Original) The gateway according to claim 2, wherein said conversion section comprises a signaling gateway unit which converts the call-control signal and a media gateway unit which converts the audio signal and the video signal, wherein said detecting section detects the conversion-process information used in a conversion process in the media gateway unit.

4. (Original) The gateway according to claim 2 or 3, wherein the conversion of the call-control signal is conversion between a Q.931 signal and an SIP signal, the conversion of the audio signal is conversion between an AMR bit stream and a G.723.1 signal, and the conversion of the video signal is conversion between an MPEG4 bit stream and an H.263 signal.

5. (Original) A system for charging fees for communication between networks of different types, said system comprising:

a first terminal which performs a call control;

a second terminal which responds to the call control performed by the first terminal; a first network to which the first terminal is connected;

a second network to which the second terminal is connected; and a gateway which connects the first network and the second network, wherein:

the first network and the second network use different signal formats;

the first network comprises a fee-charging system;

the gateway converts a signal from the first network to a suitable signal for the signal format of the second network and transmits the signal to the second network, converts a signal from the second network to a suitable signal for the signal format of the first network and transmits the signal to the first network, detects conversion-process information containing at least one of the time spent to convert the signal and the amount of data converted, and transmits the conversion-process information to the fee-charging system, in order to accomplish communication between the first terminal and the second terminal; and the fee-charging system performs a fee-charging process in accordance with the conversion-process information, to charge a fee on a user of the first terminal.

6. (Original) The system according to claim 5, wherein the gateway detects the conversion-process information after the first terminal and the second terminal have been connected to each other.

7. (Original) The system according to claim 5, wherein the gateway detects the conversion-process information about at least one of a signal generated by an audio CODEC and a signal generated by a video CODEC.

8. (Original) A method of charging fees for communication between networks of different types, comprising the steps of:

connecting a first network and a second network using a signal format different from that of the first network, by means of a gateway which converts a communication signal from a first terminal connected to the first network, to a suitable signal for the signal format of the second network and converts a communication signal from a second terminal connected to the second terminal, to a suitable signal for the signal format of the first network;

detecting conversion-process information containing at least one of the time spent to convert a signal and the amount of data converted, said signal having been transmitted after the first terminal and the second terminal have been connected to each other, by the gateway;

transmitting the conversion-process information to a fee-charging system of the network to which the first or second terminal that is a calling side is connected, by the gateway; and charging a fee on a user of the calling-side terminal, said fee being fixed or calculated on the basis of communication time, based on the conversion-process information, by the fee-charging system.

9. (Original) The method according to claim 8, wherein the conversion-process information includes at least one of the time spent to convert signals in an audio CODEC and video CODEC and the amount of data converted therein.